

**AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning at page 5, line 7 and ending at page 5, line 17, as amended on June 22, 2007, with the following rewritten paragraph:

The aforementioned 1,4-di-substituted diacetylene polymers according to the present invention (referred to as the "present polymer") can be produced by:

(1) irradiating a solution of soluble 1,4-di-substituted diacetylene polymer with laser light having a wavelength within the range of 250 to 1200 nm, and preferably 550 to 900 nm, to cause a photodegradation reaction of said polymer, ~~without mixing sensitizer~~, wherein the irradiation time is from 10 seconds to 180 minutes,

or

(2) heating a solution of 1,4-di-substituted diacetylene polymer to a temperature of 100 to 300°C to cause thermal degradation of said polymer, ~~without mixing sensitizer~~, wherein heating time is from 30 minutes to 5 hours.